

REMARKS**35 U.S.C. 103 Rejection**


Claims 9-13, 15-17, 25-29, and 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jewell in view of Goetz et al, U.S. Patent 6,630,692 (hereinafter "Goetz"). Applicants respectfully traverse the rejection.

The attached declaration by Applicants pursuant to rule 1.131 demonstrates conception and reduction to practice of the claimed inventions prior to May 29, 2001. The successful simulation results are believed to be a reduction to practice in this case since they show the devices would work for their intended purpose. The advantageous band structures achieved in the present invention must be determined by simulation, as they cannot be determined by an actual test. In addition, the declaration signed October 29, 2001 by Applicants' agent Mark E. Schmidt pursuant to rule 1.131, in combination with the attached declaration by Applicants, demonstrates conception of the claimed inventions prior to May 29, 2001 coupled with due diligence by Applicants and their agent from prior to May 29, 2001 to the filing of the present application. Applicants respectfully submit that the attached declaration and the declaration signed October 29, 2001 by Applicants' agent Mark E. Schmidt remove Goetz as a prior art reference.

Jewell alone does not anticipate or render claims 9 and 25 obvious. Claims 9 and 25 recite graded layers with the stoichiometry $\text{In}_x\text{Al}_y\text{Ga}_{1-x-y}\text{N}$ where $0 \leq x \leq 1$, $0 \leq y \leq 1$, $x + y \leq 1$. In Jewell's column 26, lines 55-65, the passage of Jewell cited by the Examiner as teaching a III-nitride alloy, the layers are InGaAsN . Because Jewell's layers contain As, they are not $\text{In}_x\text{Al}_y\text{Ga}_{1-x-y}\text{N}$ as recited in claims 9 and 25. Jewell thus fails to teach every element of claims 9 and 25.

Applicants thank the Examiner for withdrawing his rejections under 35 U.S.C. 112.

In view of the above arguments, Applicants respectfully request allowance of claims 9-13, 15-17, 25-29 and 31-33. Should the Examiner have any questions, the Examiner is invited to call the undersigned at (408) 382-0480.

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Respectfully submitted,



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